



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,781	10/05/2005	Gregorius Maria Hubertus Goyarts	GOY-4	5611
6980 7590 02/11/2011 TROUTMAN SANDERS LLP 5200 BANK OF AMERICA PLAZA 600 PEACHTREE STREET, N.E. SUITE 5200 ATLANTA, GA 30308-2216				
EXAMINER KHATRI, PRASHANT J				
ART UNIT 1783		PAPER NUMBER		
NOTIFICATION DATE 02/11/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jim.schutz@troutmansanders.com  
patents@troutmansanders.com  
ellen.walters@troutmansanders.com

**Office Action Summary****Application No.**

10/551,781

**Applicant(s)**GOYARTS, GREGORIUS MARIA  
HUBERTUS**Examiner**

PRASHANT J. KHATRI

**Art Unit**

1783

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/18/2011
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

In response to RCE filed 12/17/2010. Claims 1 and 4-27 are pending. Claims 1, 8, and 17 were amended. Claims 22-27 were added as new.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/17/2010 has been entered.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the term "interlayer material". It is not clear whether this is the same as the moisture-absorption element. Examiner assumes that it is the same. Claims 9-21 are rejected as being dependent upon claim 8. Clarification is requested.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-10, 13-14, and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyarts (**CA 2413921**) in view of Mesek et al. (**US 4045833**).

6. Goyarts discloses a washable bed pad. Concerning claims 1 and 22, Goyarts discloses a washable bed comprising a moisture-permeable top layer, moisture-impermeable bottom layer, and a moisture absorption element comprising a textile disposed between the top layer and bottom layer (**abstract; pp. 7-8, lines 7+**). The layers are joined together by means of an adhesive composition that is disposed between the bottom layer and absorption element and top layer and moisture absorption element (i.e. the interfacial regions) and the composition can be applied as a spot coating (**p. 10, lines 1+; p. 11, lines 32+; p. 12, lines 20+**). Regarding the moisture-permeable top layer being a fraying-free fabric, it is noted that since the top layer is comprised of the same materials as that in the present invention, the fabric is considered to be "fraying-free". Concerning the present limitation of the multilayer material not having any finishing and/or smaller part obtained, it is noted that a border finish is produced as necessary (**p. 9, lines 1+**). As such, the border finish is considered to be optional by Goyarts and the laminate can be formed without finishing.

Concerning claims 4 and 23, it is noted that the thermoplastic can be applied to the border resulting in the top layer becoming impermeable to liquid (*p. 19, lines 13+*). While it is noted that these are two separate embodiments with respect to the disposition of the adhesive at the borders and the spot bonding within the interfaces, it is noted that one of ordinary skill in the art would have been motivated to provide adhesive at the edges to form a border in order to allow for the layers to be impermeable at the edges.

Regarding claims 5-6 and 25-26, the adhesive composition is comprised of a thermoplastic material or crosslinkable polyurethanes that react with atmospheric humidity (*p. 11, lines 1+*). Concerning claims 7, 21, and 27, Goyarts disclose the use of additional layers for preventing bed sores and foam layers (*pp. 15-16, lines 38+*). Concerning claims 8-10, 13-14, and 18, Goyarts discloses assembling the laminate with a spot coating layer between the top layer and moisture-absorption element and a layer of thermoplastic bonding material applied in a pattern (*pp. 14-15, lines 20+; FIG. 1*). The bonding material is comprised of thermoplastic bonding materials or crosslinkable polyurethanes are applied by screen printing and bonding is applied by heating (*p. 15, lines 15+*). Regarding claim 18, it is noted that atmospheric humidity and pressure are used to cure the adhesive layer (*p. 15, lines 27+*). However, Goyarts is silent to the type of spot bonding and amount thereof.

7. Mesek et al. disclose an absorbent bed pad wherein a transition fabric is bonded to a liquid impervious layer. Concerning the adhesive layer and patterning thereof, Mesek et al. disclose an embodiment wherein the transition fabric is adhered to the

liquid impervious layer by forming bead lines of adhesive in a pattern spaced as such that the voids due to separation at the interface between the backing sheet and fabric layer will not be formed when the bed pad is used while also allowing the body fluids to flow through (**col. 7, lines 9+**). Examiner considers the phrase "voids" as those allowing for delamination at the interface of the structure. The adhesive can be applied in a wide variety of patterns including "island" bonds, which is equivalent to the presently claimed dot pattern, wherein the overall adhesion between the backing sheet and the absorbent fabric layer is close and no portion of the backing layer should be more than about 2 inches from a point of adhesion (**col. 7, lines 36+**). Given the above disclosure, it is clear that spacing between the "island" bonds can be varied, it is clear that the amount of adhesive composition used can be varied. The resultant bed pads are cut off by the cutter which clearly does not have any further finishing (**col. 7, lines 59+**).

8. All of the elements were known within the art. The only difference is a single disclosure containing all of the presently claimed elements. Goyarts discloses a washable bed comprising a moisture-permeable top layer, moisture-impermeable bottom layer, and a moisture absorption element comprising a textile disposed between the top layer and bottom layer with an adhesive composition disposed between the bottom layer and absorption element and top layer and moisture absorption element (i.e. the interfacial regions) and the composition can be applied as a spot coating. However, Goyarts is silent to the type of spot bonding and amount thereof. Mesek et al. disclose an embodiment wherein the transition fabric is adhered to the liquid impervious

layer by forming bead lines of adhesive in a pattern. While it is noted that Mesek is silent to the structure of Goyarts and at least two adhesive layers, it is noted that Mesek discloses that the pattern is spaced as such that the voids due to separation at the interface between the backing sheet and fabric layer will not be formed when the bed pad is used while also allowing the body fluids to flow through. Furthermore, Mesek discloses that an overall adhesion between the backing sheet and the absorbent fabric layer is close and no portion of the backing layer should be more than about 2 inches from a point of adhesion. As such, it is clear that Mesek discloses that the amount of adhesive is an optimizable feature since the amount affects both the level of adhesion and the fluid absorption and transport. Given that Goyarts discloses a spot pattern that can be disposed in the interfacial regions and Mesek discloses that the amount of adhesive affects the fluid absorption and transport and addition the adhesion between layers, one of ordinary skill in the art would have been able to determine the proper amount of adhesive used in the laminate in order to optimize the fluid absorption and transport and adhesiveness of the laminate.

9. Claims 1, 4-10, 13-14, and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyarts (**CA 2413921**) in view of Levy (**US 5114418**) and Mesek et al. (**US 4045833**).

10. Goyarts discloses a washable bed pad. Concerning claims 1 and 22, Goyarts discloses a washable bed comprising a moisture-permeable top layer, moisture-impermeable bottom layer, and a moisture absorption element comprising a textile

disposed between the top layer and bottom layer (**abstract; pp. 7-8, lines 7+**). The layers are joined together by means of an adhesive composition that is disposed between the bottom layer and absorption element and top layer and moisture absorption element (i.e. the interfacial regions) and the composition can be applied as a spot coating (**p. 10, lines 1+; p. 11, lines 32+; p. 12, lines 20+**). Regarding the moisture-permeable top layer being a fraying-free fabric, it is noted that since the top layer is comprised of the same materials as that in the present invention, the fabric is considered to be "fraying-free". Concerning the present limitation of the multilayer material not having any finishing and/or smaller part obtained, it is noted that a border finish is produced as necessary (**p. 9, lines 1+**). As such, the border finish is not necessary and the laminate can be formed without finishing.

Concerning claims 4 and 23, it is noted that the thermoplastic can be applied to the border resulting in the top layer becoming impermeable to liquid (**p. 19, lines 13+**). While it is noted that these are two separate embodiments with respect to the disposition of the adhesive at the borders and the spot bonding within the interfaces, it is noted that one of ordinary skill in the art would have been motivated to provide adhesive at the edges to form a border in order to allow for the layers to be impermeable at the edges. Regarding claims 5-6 and 25-26, the adhesive composition is comprised of a thermoplastic material or crosslinkable polyurethanes that react with atmospheric humidity (**p. 11, lines 1+**). Concerning claims 7, 21, and 27, Goyarts disclose the use of additional layers for preventing bed sores and foam layers (**pp. 15-16, lines 38+**).



Concerning claims 8-10, 13-14, and 18, Goyarts discloses assembling the laminate with a spot coating layer between the top layer and moisture-absorption element and a layer of thermoplastic bonding material applied in a pattern (**pp. 14-15, lines 20+; FIG. 1**). The bonding material is comprised of thermoplastic bonding materials or crosslinkable polyurethanes are applied by screen printing and bonding is applied by heating (**p. 15, lines 15+**). Regarding claim 18, it is noted that atmospheric humidity and pressure are used to cure the adhesive layer (**p. 15, lines 27+**). However, Goyarts is silent to the type of spot bonding and amount thereof.

11. Levy discloses a highly absorbent, leak-proof, breathable diaper. Prior art discloses a three-layer diaper that is comprised of at least one layer that is a fabric and reusable (**FIG. 1; col. 1, lines 33+**). Regarding the patterning of adhesive disclosed in claims 1-2 and 8, prior art discloses a urethane adhesive that is applied between the top layer (**element 10**) and intermediate layer (**element 12**) and intermediate layer and bottom layer (**element 14**). Further, it is noted that the adhesive material between the above layers is applied by using a cross-hatch, line-gravure, or dot-roller to ensure the resulting laminations remain intact after machine washings (**col. 2, lines 25+**). Given that Levy discloses Further, Examiner takes the position that the dot-roller would form a series of dots to form the adhesive pattern and forms the presently claimed interfacial region between the layers as shown in Figure 1. Further, as shown by prior art, the material is washed for testing purposes to determine durability after curing of the adhesive (**col. 2, lines 30+**). Concerning the amount of adhesive applied, it is considered to be an optimizable feature given that the amount of adhesive directly

affects the bond strength of the laminate that one of ordinary skill in the art can adjust.

See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. Mesek et al. disclose an absorbent bed pad wherein a transition fabric is bonded to a liquid impervious layer. Concerning the adhesive layer and patterning thereof, Mesek et al. disclose an embodiment wherein the transition fabric is adhered to the liquid impervious layer by forming bead lines of adhesive in a pattern spaced as such that the voids due to separation at the interface between the backing sheet and fabric layer will not be formed when the bed pad is used while also allowing the body fluids to flow through (**col. 7, lines 9+**). Examiner considers the phrase "voids" as those allowing for delamination at the interface of the structure. The adhesive can be applied in a wide variety of patterns including "island" bonds wherein the overall adhesion between the backing sheet and the absorbent fabric layer is close and no portion of the backing layer should be more than about 2 inches from a point of adhesion (**col. 7, lines 36+**). Given the above disclosure, it is clear that spacing between the "island" bonds can be varied, it is clear that the amount of adhesive composition used can be varied. The resultant bed pads are cut off by the cutter which clearly does not have any further finishing (**col. 7, lines 59+**).

13. All of the elements were known within the art. Goyarts discloses a washable bed comprising a moisture-permeable top layer, moisture-impermeable bottom layer, and a moisture absorption element comprising a textile disposed between the top layer and bottom layer with an adhesive composition disposed between the bottom layer and absorption element and top layer and moisture absorption element (i.e. the interfacial

regions) and the composition can be applied as a spot coating. However, Goyarts is silent to the type of spot bonding and amount thereof. Levy discloses a three-layer laminate that is a highly absorbent, leak-proof, breathable diaper comprising a patterned adhesive material disposed in the interfacial regions between the layers. Mesek et al. disclose an embodiment wherein the transition fabric is adhered to the liquid impervious layer by forming bead lines of adhesive in a pattern. The motivation to combine the above references is drawn towards the patterning the adhesive material between the each layer a three-layer laminate applied by using a cross-hatch, line-gravure, or dot-roller to insure the resulting laminations remain intact after machine washings and as shown by Mesek, the amount of adhesive affects the fluid absorption and transport and addition the adhesion between layers. As such, it would have been obvious to one of ordinary skill in the art to optimize the fluid absorption and transport and adhesiveness of the laminate by adjusting the amount of adhesive used.

14. Claims 11-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyarts (**CA 2413921**) in view of Mesek et al. (**US 4045833**) as applied to claim 8 above, and further in view of McIntyre (**US 4911948**).

15. Goyarts and Mesek disclose the above but are silent to the use of a rotary screen printing process for disposing the adhesive composition.

16. McIntyre discloses a method of screen printing of hot melt adhesives onto moving web substrates such as diapers and the like (**col. 2, lines 19+**). The screen printing apparatus is comprised of a slot nozzle within a screen cylinder sleeve (**col. 3,**

**lines 37+).** Furthermore, it is noted that the hot melt adhesive material can be a polyurethane moisture cure type (**col. 6, lines 14+).** Regarding the heated stencil, prior art discloses the screen cylinder sleeve is heated to prevent solidification of the adhesive material (**col. 2, lines 39+).** Examiner takes the position that the screen cylinder has pores to allow dispersion of the adhesive material as the stencil as the adhesive material is distributed through the pores, which is the primary purpose of the stencil. Given that the screen cylinder is heated to prevent the clogging of the pores, the temperature would inherently be at a temperature above the melting point as if the temperature would be below the melting point, the pores of the screen cylinder would be clogged. Concerning the seamless nature of the cylinder, as shown by prior art in Figure 3, there is no seam on the cylinder. The process and apparatus as shown allows for improved speed and viscosity regulation by heating (**cols. 1 and 2).** Regarding the cutting of individual articles made from the continuous process, prior art discloses a die cutting process may be added after the screen printing process (**col. 2, lines 8+).** Examiner takes the position that the use of a cutting process after lamination to produce individual articles is an obvious addition to the manufacturing process as it would allow for easier packaging of goods for sale.

17. However, note that while McIntyre does not disclose all the features of the present claimed invention, McIntyre is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a

certain concept, namely, screen printing of adhesive material using a roller stencil in order to increase production of articles containing adhesives on web material and in combination with the primary reference, discloses the presently claimed invention.

18. All of the elements were known within the art individually. The only difference was a single disclosure containing all of the presently claimed elements. Goyarts and Mesek disclose the above but are silent to the use of a rotary screen printing process for disposing the adhesive composition. McIntyre discloses a rotary screen printing process onto web substrates using a hot melt adhesive. Although McIntyre only discloses the screen printing process onto one layer of material, it would be obvious to one with ordinary skill in the art to use a second screen printing section to coat a second layer of material. The motivation to combine the above references is drawn towards the increase in production and uniformity of the adhesive layer as shown by McIntyre (**col. 2, lines 25+**). Examiner also notes that Goyarts discloses depositing the adhesive composition on the top layer and bottom layers prior to lamination (**FIG. 1; pp. 14-15, lines 20+**). Therefore, it would have been obvious to one of ordinary skill in the art to apply the adhesive material in the resultant laminate shown above.

19. Claims 11-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyarts (**CA 2413921**) in view of Levy (**US 5114418**) and Mesek et al. (**US 4045833**) as applied to claim 8 above, and further in view of McIntyre (**US 4911948**).

20. Goyarts, Levy, and Mesek disclose the above but are silent to the use of a rotary screen printing process for disposing the adhesive composition.
21. McIntyre discloses a method of screen printing of hot melt adhesives onto moving web substrates such as diapers and the like (**col. 2, lines 19+**). The screen printing apparatus is comprised of a slot nozzle within a screen cylinder sleeve (**col. 3, lines 37+**). Furthermore, it is noted that the hot melt adhesive material can be a polyurethane moisture cure type (**col. 6, lines 14+**). Regarding the heated stencil, prior art discloses the screen cylinder sleeve is heated to prevent solidification of the adhesive material (**col. 2, lines 39+**). Examiner takes the position that the screen cylinder has pores to allow dispersion of the adhesive material as the stencil as the adhesive material is distributed through the pores, which is the primary purpose of the stencil. Given that the screen cylinder is heated to prevent the clogging of the pores, the temperature would inherently be at a temperature above the melting point as if the temperature would be below the melting point, the pores of the screen cylinder would be clogged. Concerning the seamless nature of the cylinder, as shown by prior art in Figure 3, there is no seam on the cylinder. The process and apparatus as shown allows for improved speed and viscosity regulation by heating (**cols. 1 and 2**). Regarding the cutting of individual articles made from the continuous process, prior art discloses a die cutting process may be added after the screen printing process (**col. 2, lines 8+**). Examiner takes the position that the use of a cutting process after lamination to produce individual articles is an obvious addition to the manufacturing process as it would allow for easier packaging of goods for sale.

22. However, note that while McIntyre does not disclose all the features of the present claimed invention, McIntyre is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely, screen printing of adhesive material using a roller stencil in order to increase production of articles containing adhesives on web material and in combination with the primary reference, discloses the presently claimed invention.

23. All of the elements were known within the art individually. The only difference was a single disclosure containing all of the presently claimed elements. Goyarts, Levy, and Mesek disclose the above but are silent to the use of a rotary screen printing process for disposing the adhesive composition. McIntyre discloses a rotary screen printing process onto web substrates using a hot melt adhesive. Although McIntyre only discloses the screen printing process onto one layer of material, it would be obvious to one with ordinary skill in the art to use a second screen printing section to coat a second layer of material. The motivation to combine the above references is drawn towards the increase in production and uniformity of the adhesive layer as shown by McIntyre (**col. 2, lines 25+**). Examiner also notes that Goyarts discloses depositing the adhesive composition on the top layer and bottom layers prior to lamination (**FIG. 1; pp. 14-15, lines 20+**). Therefore, it would have been obvious to one of ordinary skill in the art to apply the adhesive material in the resultant laminate shown above.

***Response to Amendment***

24. The declarations under 37 CFR 1.132 filed 12/17/2010 is insufficient to overcome the rejection of claims 1 and 4-27 based upon the Levy and McIntyre references as set forth in the last Office action because: There is no comparative data with respect to the Levy reference which discloses the effect of interfacial bonding by means of forming cross-hatching or dots of adhesive, results in the lamination being intact after washings (***col. 2, lines 24+***). As such, it is clear that the amount is optimizable with respect to the amount of adhesive. Examiner also notes that the examples provided by Applicant are drawn towards a specific set of materials. Given that the present claims broadly recite "moisture-permeable top layer material", "moisture absorption element", and "moisture-impermeable bottom layer", the declarations are not commensurate in scope with the claims since Applicant has not shown the effect with respect to all materials broadly considered "moisture-permeable top layer material", "moisture absorption element", and "moisture-impermeable bottom layer". Examiner also notes that based upon the declaration, it appears that the amount of adhesive with respect to the function of the laminate is in fact, optimizable. As such, the rejections with respect to the Levy and McIntyre references are found to be valid.

***Response to Arguments***

25. Applicant's arguments, see pp. 9-16, filed 12/17/2010, with respect to the 35 USC 103(a) rejections of claims 1 and 4-22 under Hahn in view of Levy and Tolbert with evidence by Gagliardi, Carlucci, and Peterson and further in view of McIntyre have been



fully considered and are persuasive. The rejections of the above claims have been withdrawn. Examiner notes that Hahn and Tolbert have been overcome with the present amendment of "washable underpad". However, upon further reconsideration, Levy and McIntyre are found to be still applicable to the present claims.

Concerning Levy, Applicant asserts that no lamination is suggested or employed between the fluid permeable and/or fluid absorbing layers and Levy suggests the adhesive is a full layer and thus teaches away. As support, Applicant relies upon the drawing. Examiner respectfully disagrees regarding the adhesive being a full layer given that Levy explicitly recites forming the adhesive portion by means of cross-hatching or dot rollers which would intrinsically form discontinuous portions. While it is noted that Levy is silent to forming an interfacial bond between the permeable and absorbent layers, Examiner takes the position that Levy has clearly shown the effect of interfacial bonding by means of forming cross-hatching or dots of adhesive which results in the lamination being intact after washings (**col. 2, lines 24+**). Examiner further notes that Levy discloses that the diaper is breathable which implies the diaper has a permeability. Applicant further asserts that Levy does not address or solve the problem of wrinkling in the uppermost fluid permeable layer. Examiner respectfully disagrees and notes that the present claims require the adhesive to be in a pattern sufficiently dense to prevent what appears to be the entire laminate from wrinkling. Given that the Levy discloses the several patterns including cross-hatch, lines, and dots at an amount to give satisfactory bond strength which the patterns are the same as that presently claimed, Examiner takes the position that one of ordinary skill in the art would

have been able to determine the amount of adhesive material used the resultant laminate of Hahn and Levy would result in the presently claimed laminate. Examiner further notes that the use is as a diaper which would thereby be sufficiently flexible in order to be used.

Concerning the McIntyre reference, Applicant asserts that the prior art discloses for diapers only placing the adhesive material on the perimeter. While the Examiner acknowledges that in terms of a diaper, this is the only disclosure, Examiner notes that the cylinder is comprised of pores and as such the broad disclosure of pores would include dots and lines. Examiner further notes that McIntyre discloses providing adhesive deposits where required and not applied where they are not needed (**col. 2, lines 12+**). Given the above disclosure, it is clear that one of ordinary skill in the art would have been able to pattern the adhesive and not just for the seams and edges. As such, the references when combined teach the present invention and have the amount of adhesive disposed to keep from wrinkling and inflexible. As such, the references are considered to be applicable to the present claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRASHANT J. KHATRI whose telephone number is (571)270-3470. The examiner can normally be reached on M-F 8:00 A.M.-5:00 P.M. (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia L. Nordmeyer/  
Primary Examiner, Art Unit 1788

PRASHANT J KHATRI  
Examiner  
Art Unit 1783